7.2 practice #1 NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. P(M) = 0.22; P(L) = 0.59; P(M and L) = 0.17
   1. Create the Venn Diagram and Table
   2. P(M and not L) =
   3. P(not M and not L) =
   4. P(M or not L) =
   5. P(not M or not L) =
2. In a random sample of students it was found that 52% were female, 85% had a smart phone, and 39% were females with a smart phone.
   1. Create the Venn diagram and Table
   2. What is the probability that a randomly sampled student is:
3. Not a female
4. A female and doesn’t own a smart phone
5. Not a female and owns a smart phone
6. Not a female or doesn’t own a smart phone
7. A random sample of chat room users was taken in a study about negative criticisms about others. Out of the 193 people surveyed, 27 said they have criticized others(O), 42 said they have been personally criticized(P), and 19 said they have had both criticized and been personally criticized.
8. Create the Table for this situation.
9. What is the probability that a randomly sampled chat room person is:
10. Has not criticized others
11. Has criticized others and not been criticized personally
12. Has not criticized others or not been criticized personally
13. Has not criticized others or has been criticized personally
14. Given the following probability model, answer the questions below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **M&M Color** | **Brown** | **Blue** | **Red** | **Green** | **Yellow** | **Orange** |
| Probability | 35% | 5% | 20% | ? | 15% | 10% |

What is the probability that and M&M is…

* 1. Green?
  2. Not Brown?
  3. Brown or Red?
  4. Not a primary color? (note: primary colors are red, blue, yellow)
  5. Green or Orange?
  6. Neither Red nor Yellow?